Figure 1A. Peptide-linker-β chain construct

Peptide - ASG₄SG₃ - MFIC β chain regions

Figure 1B. Schematic view of peptide-linked MHC binding grave

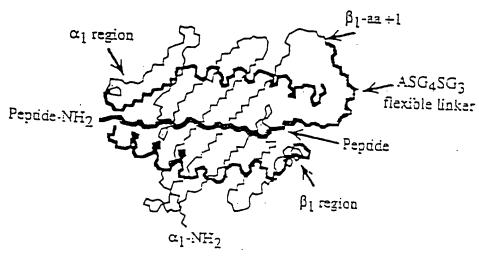


Figure 1C. Schematic view of soluble peptide-linked MHC-IgG C-region fusion protein

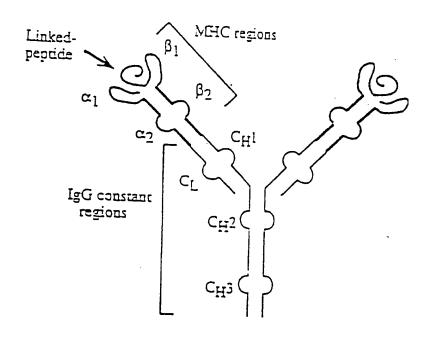


Figure 2: I-A ^d α chain cloning scheme

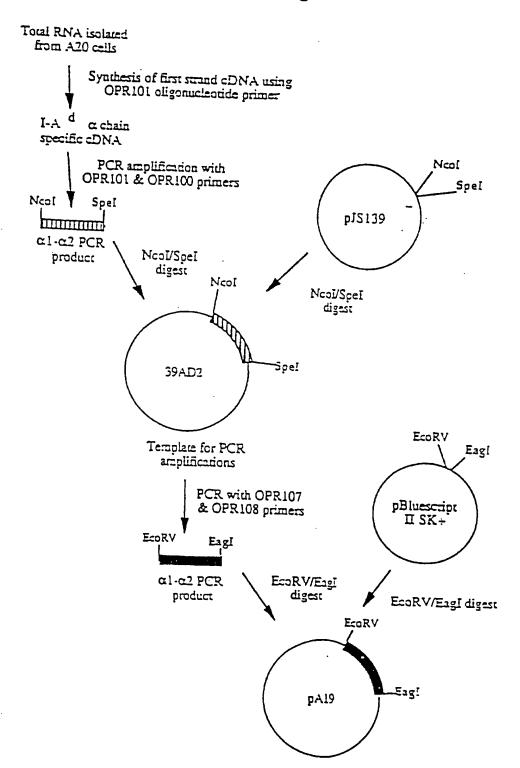


Figure 3: I-A d β chain cloning scheme

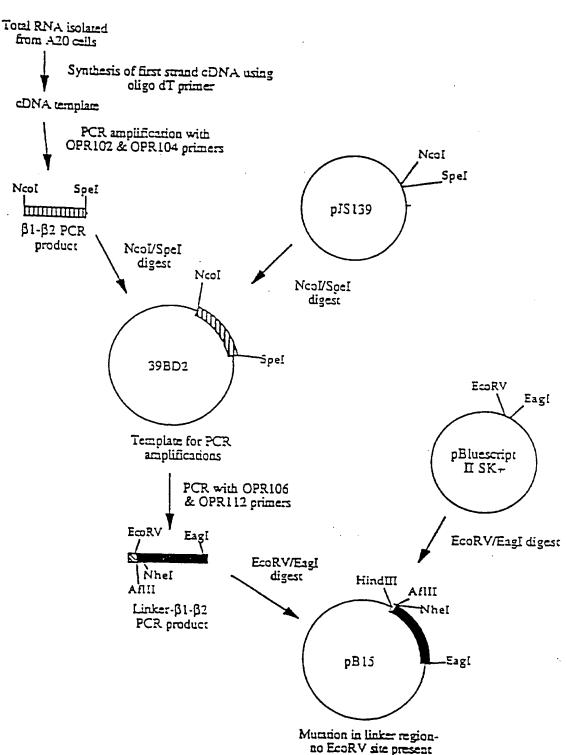


Figure 3: cont.

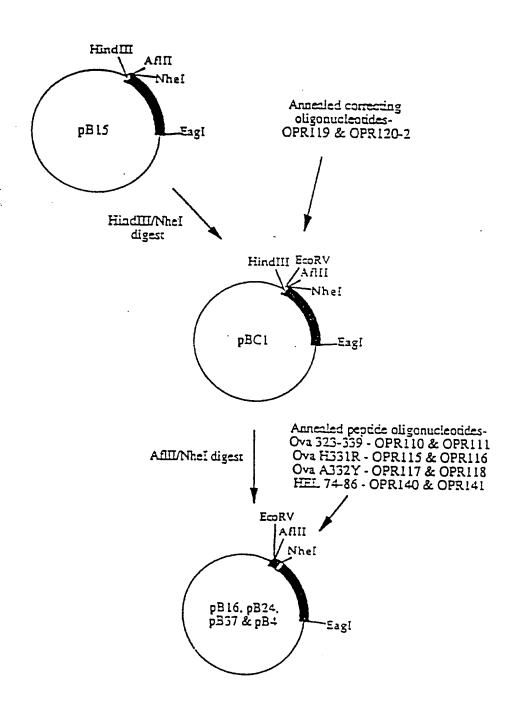


Figure 4: HLA-DR1 α chain cloning scheme

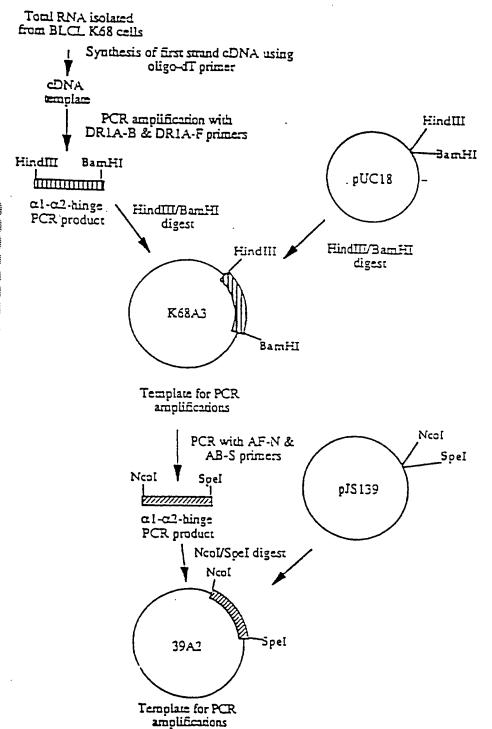


Figure 4: cont.

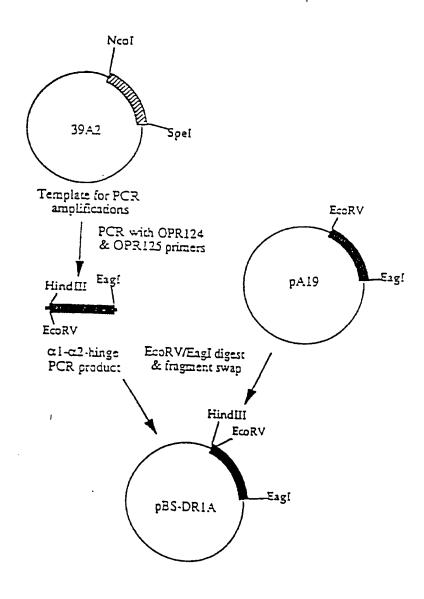


Figure 5: HLA-DR1 β chain cloning scheme

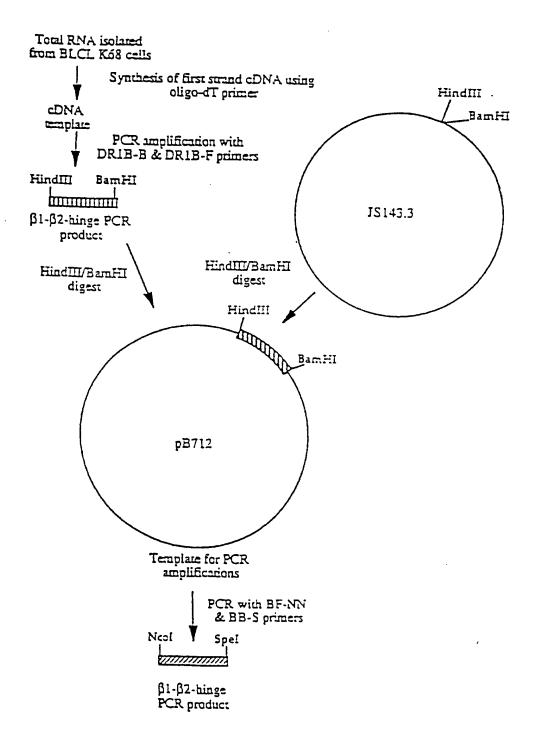


Figure 5: cont.

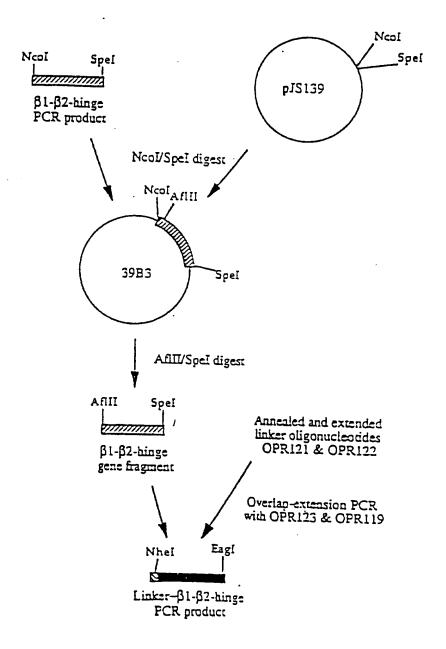


Figure 5: cont.

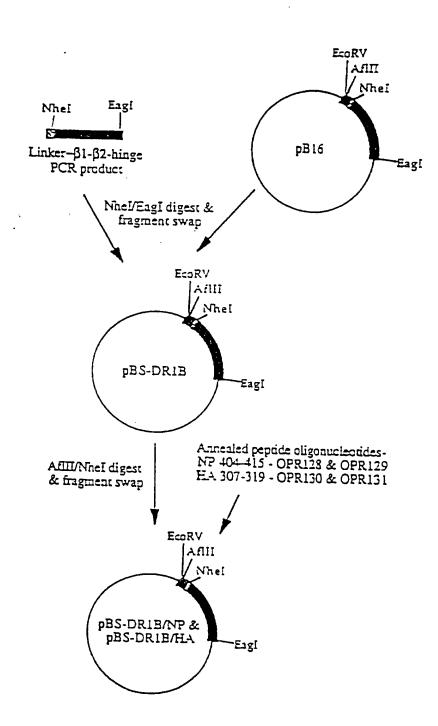


Figure 6: I-A $^{\rm s}$ α chain cloning scheme

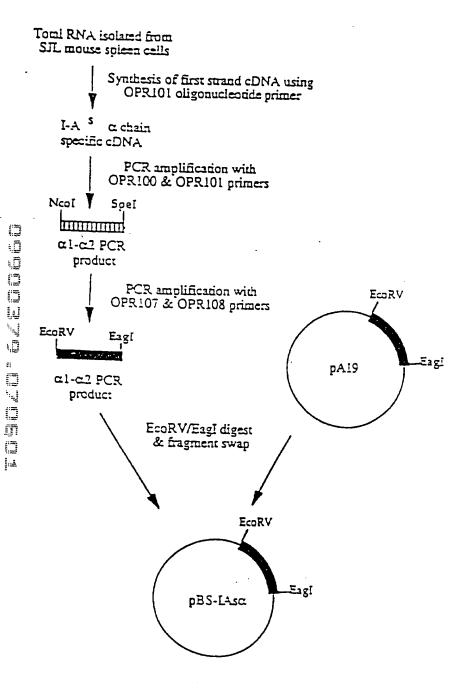


Figure 7: I-A β chain cloning scheme

Total RNA isolated from SIL mouse splees cells Synthesis of first strand cDNA using OPR106 primer I-A S β specific cDNA complare PCR amplification with VW310 & OPR 106 primers β1-β2 PCR product EcoRV AfIII PCR amplification with NheI VW309 & OPR106 primers NheI pB16 Eagl Linker-B1-B2 Nacl/Engl digest & PCR product fragment swap ECORV ASIII Nhel/EagI Nhel digest pBS-IAsβ Eagl Annealed peptide oligonucleotides-MBP 91-103 - VW315 & VW316 PLP 139-151 - VW313 & VW314 MBP 1-14 - VW317 & VW318 AfIII/NheI digest & tradineur amab EcoRV IIIIA Nhel pBS-LAsBMBP91 pBS-IASB/PLP & Eagi JSELASCAMB21

Figure 8 - Oligonucleotides used in constructing MHC vectors

I-Ad/I-As PCR primers and cloning oligonucleotides (restriction site are underlined).

OPRIO0

5'-GGG GGG GCC ATG GCC GAA GAC GAC ATT GAG GCC GAC-3'

OPR101

5'-GCG GCG ACT AGT CCA GTG TTT CAG AAC CGG CTC-3'

DPR:07

5'-CCC CCC GAT ATC TCA GCT TCC AGC AGT GGA GAC GAC ATT GAG GCC G-3'

OPRIO8

5'-CCC CCC <u>CGG CCG</u> CTA CTT ACG TTT CCA GTG TTT CAG AAC CGG C-3'

OPRIO2

5/-GGG GGG GCC ATG GCC GGA AAC TCC GAA AGG CAT TTC G-3/

OPRIO4

5'-GCG GCG ACT AGT CCA CTC CAC AGT GAT GGG GC-3'

0PR106

5'-CCC CCC CGG CCG TAC CTG AGG ACC ACT CCA CAG TGA TGG-3'

OPR112

5'-CCC CCC GAT ATC ACA GGT GTC TTA AGT GCT AGC GGR GGG GGC GGA AGC GGC GGA GGG GGA AAC TCC GAA AGG CAT TTC-3'

OPR119

5'-AGC TIG ATA TOR CRG GIG TOT TAR GIG GAG-3'

OPR120-2

5'-CTA GCT CCA CTT AAG ACA CCT GTG ATA TCA-3'

VW310

5'-TCC GGR GGC GGC GGR GAC TCC GAA AGG CRT TTC G-3'

VW309

5'-CGA TOG CTA GOG GOG GTG GTG GTT CCG GTG GCG GCG GAG-3'

OPR136

5'-CCC CCC $\underline{\text{AGG}}$ CTT $\underline{\text{CCC}}$ $\underline{\text{GGG}}$ CCA CCA TGC CST $\underline{\text{GCA}}$ $\underline{\text{GCA}}$ $\underline{\text{GAG}}$ CTC $\underline{\text{TG}}$ -3'

OPR139

5'-CCC CCC GAG CTC GAA TTC TCA TAA AGG CCC TGG GTG TCT G-3'

Figure 8 - cont.

OPRL32

5' -CCC CCC \underline{AAG} CTT \underline{CCC} \underline{GGG} CCA CCA TGG CTC TGC \underline{AGA} TCC CCA \underline{GC} -3'

OPR133

5'-CCC CCC ACT TAA GGT CCT TGG GCT GCT CAG CAC C-3'

OPRI34

5'-CCC CCC <u>CCA TCA CTG TGG</u> AGT GGA GGG-3'

OPRI35

S'-CCC CCC GAG CTC GAA TTC TCA CTG CAG GAG CCC TGC TGG-3'

HLA-DR1 PCR primers and cloning oligonucleotides.

DRIA-F

5'-GGG GGG AAG CTT ATG ATC AAA GAA GAA CAT GTG ATC ATC-3'

DRLA-B

5'-GCG GCG GGA TCC GTT CTC TGT AGT CTC TGG GAG AGG-3'

DRIB-E

 5^{\prime} -GGG, GGG AAG CTT ATG GGG GAC ACC CGA CCA CGT TTC TTG TGG CAG C-3 $^{\prime}$

AF-N

5'-GGG GGG GCC ATG GCC ATC AAA GAA GAA CAT GTG ATC ATC-3'

A3-5

5'-GCG GCG ACT AGT GTT CTC TGT AGT CTC TGG GAG AGG-3'

OPRI24

5'-GGG GGG AAG CTT GAT ATC TCA GCT TCC AGC AGT AGT ATC AAA GAA CAT GTG ATC-3'

OPR125

5'-GGG GGG CGG CCG CTA CTT ACG TTT CTC TGG GAG AGG GCT TGG AGC-3'

DR13-3

5'-GCG GCG GGR TCC CTT GCT CTG TGC AGR TTC AGR CC-3'

BE-NN

5'-GGG GGG GCC ATG GCC GGA TCC GCT AGC GGG GAC ACC CGA CCA CGT TTC TTG-3'

Figure 3 - com.

BB-5

5'-GCG GCG ACT AGT CTT GCT CTG TGC AGA TTC AGA CCG-3'

OPR121

5'-GTT GTC TTA AGT GGA GCT AGC GGA GGG GGC GGG TCC GGA GGT GGT GGG GAC ACC CG-3'

OPR122

5'-GAA ATG ACA TTC AAA CTT CAG CTG CCA CAA GAA ACG TGG TCG GGT GTC CCC ACC ACC-3'

OPRIZ3

5'-GGG GGG CGG CGG TAC CTG AGG ACT TGC TCT GTG CAG ATT CAG-

Peptide oligonucleotides.

Ova 323-339

OPRI10

5'-TTA AGT ATC TOT CAG GCT GTT CAC GCT GCT CAC GCT GAA ATC AAC GAA GCT GGT CGT G-3'

OPRILL

 5^{\prime} -CTA GCA CGA CGA GCT TCG TTG ATT TCA GCC TGA GCA GCG TGA ACA GCC TGA GAG ATA C-3 $^{\prime}$

Ova HISIR

OPRIL5

5'-TTA AGT ATC TOT CAG GOT GTT CAC GCT GCT CGG GCT GAA ATC AAC GAA GCT GGT CGT \underline{G} -3'

OPR116

 5^{\prime} -CTA GCR CGA CCR GCT TCG TTG ATT TCA GCC CGA GCR GCG TGA ACR GCC TGA GAG ATA C-3 $^{\prime}$

Ova A332Y

OPR117

 5^\prime -TTA AGT ATC TCT CAG GCT GTT CAC GCT GCT CAC TAC GAA ATC AAC GAA GCT GGT CGT G-3 $^\prime$

OPRI15

 $^{5'}$ -CTA GCA CGA CGA GCT TCG TTG ATT TCA TAG TGA GCA GCG TGA ACA GCC TGA GAG ATA C-3'

Figure 8 - conv.

HEI 74-86

OPRI40

 $5^{\prime} - \underline{\text{TTA}}$ $\underline{\text{AGT}}$ AAC CTG TGC AAC ATC CCC TGC AGC GCC CTG CTG AGC TCC $\underline{\text{G-3}}^{\prime}$

OPR141

 5^{\prime} -CTA GCG GAG CTC AGC AGG GCG CTG CAGBGGG ATG TTG CAC AGG TTA $\underline{C}\text{-}3^{\prime}$

NP 404-415

CPR129

5'-TTA AGT CAG ATC AGC GTG CAG CCC GCC TTC AGC GTG CAG G-3'

OPR129

5'-CTA GCC TGC ACG CTG AAG GCG GGC TGA ACG CTG ATC TGA C-3'

HA 307-319

OPR130

5' - ITA AGT CCC AAG TAC GTG AAG CRG AAC ACC CTG AAG CTG GCC ACC G-3'

OPRI31

81

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5' -CTA GCG GTG GCC AGC TTC AGG GTG TTC TGC TTC ACG TAC TTG GGA C-3'

MBP 91-103

VW315

5' -TTA AGT CAC TAT GGC TCC CTG CCG CAG AAG TCC CAG CAC GGG CGC \overline{G} -3'

VW316

5' -CTA GCG CGC CCG TGC TGG GAC TTC TGC GGC AGG GAG CCA TAG TGA C-3'

PLP 139-151

VW313

 $5^{\prime\prime} - \overline{1124}$ Cac the off off aag tog ctg off cac ceg gar aag tie $\overline{g} - 3^{\prime\prime}$

VW3:4

5'-CTA GCG AAC TTG TTC GGG TGG CCC AGC CAC TTG CCC AGG GAG TGA $\overline{\text{C}}$ -3'

Figure 8 - cont.

16/58

MBP 1-14 VW317

5' - TIA AGT ATG GCA TCC CAG AAG CGC CCG TCC CAG CGC TCC AAG TAC CTG \underline{G} -3'

VW316

5'-CTA GCC AGG TAC TTG GAG CGC TGG GAC GGG CGC TTC TGG GAT GCC ATA C-3'

```
Figure 9A. Soluble I-Ad a chain construct
```

```
To 20 30 40 550 560 570 580

CHARTCHART THE AGE AGT GLA GLC GLC ATT EAG GET GAC GLC // CET GTT GTT ALC THE GLA GLC GLC ALL GTT ALL CHC TOT ALL CTT GTT ACC THE GLA GLC GLC ALL CTT GLA ACC THE GLA ACC THE
```

Figure 9B.

Soluble I- $A^d\beta$ chain construct

Restriction sites for insertion of oligonucleocides encoding peptides of interest ECORV Affil NheI 10 40 50 60

ATO ACT OTTO GAG TOO TOO TOA GGT ACCORDED TAG TOA GAC ACT ACC ACG AGT COA TOCCGOCGG I T V E W S S S

aal89

I-AC \$ chain IgG X chain increa

Figure 9C.

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V I I

Soluble I-A^s α chair construct



```
Figure 9 - cont.
                                                 19/58
  Figure 9D. Soluble I-A<sup>5</sup> β chain construct
                  Restriction sites for insertion of
               oligonucleosides encoding peptides of interest
         EcoRy
                      ACLEE
                                  MheI
               10
        20
                   V L S G G G G G G G G D S E R H //
                                                              1-1
         Igo H chain
                     Signal peptide
                                             Linker region
          intron
                                                                       I-AS B chain
                     cleavage sice
         610
                   620
                             630
       אדם אבד פדם פאם דפם דבר דבא פפד אבפקבבבב
       דאם זהא כאכ כדב אכב אפה אפד כבא זהכבההבהם
        : T V E W S S
                  aa:39
          I-λ<sup>S</sup> β cmain
                            IgG H chain
                             intron
Figure 9E. Soluble HLA-DR1 & chain construct
       EcoRV
       CATATETERICET TOO AGE AGT ATTE ALA GAL GAL CAT GTO ATTE ATTE // CEA GAG ACT ACA GAG AAC ALA COT ALGUAGESGESS .
                        2 C
                                  30
      CTATAGAGTCSA ACC TES TEA TAG TIT CTT CTT CTA CAC TAG TAG // CGT CTC TGA TOT CTC TTG TTT GEA TTCATCGCCGGCC

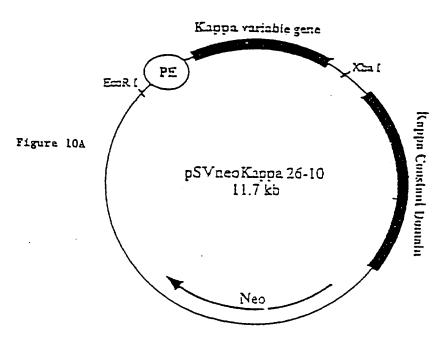
S S S I K E E H V I I // P E T T E N K R

AA192]
                                              DR-1 & chain
        intron
                cleavage site
                                                                                IGG K chain
Figure 9F. Soluble HLA-DR1 β chain construct
                Restriction sites for insertion of
             oligonucleotides encoding peptides of interest
       EcoRV
                    ACLII
                                Miel
                     20
      Igo H chain Signal peptide
                                           Linker region
                   Cleavage size
                                                                   DR-1 $ chain
                   90 630
                                                          XDs.
      בדם בהם כדה אום // דכד פנא דכד כבא באם אפה אום דכם דבא פסדאכם סבבם
                                  640
      אאב אכם פדם פאב דום // אבא כדד אפא כבד פדם דום אפם אפד פבאדטם פפפם
      Q L K // S E S A Q S K S S

TATILIT Site pt. mutation aa198]

OR-1 B chain
                                                  Igg H chain
                                                    intron
```

Figure 10. Original Mammalian Cell Expression Vectors



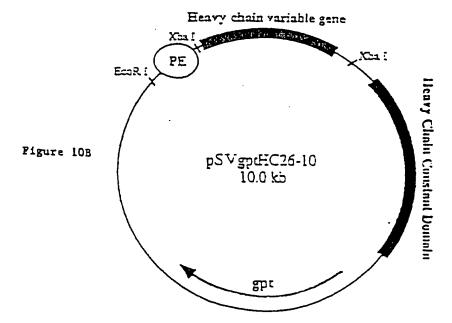
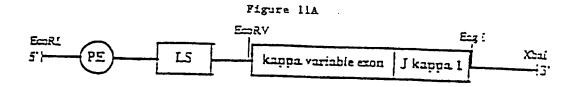
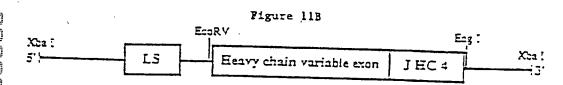




Figure II. The Z7Kh Kappa and the L7Kh Heavy Chain EcoR V and Eng I Mutated Constructs





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Figure 12. PCR Site Directed Mutagenesis for Introducing EcoRV and Eagl Restriction Sites into Kappa Chain 2.7kb Insert

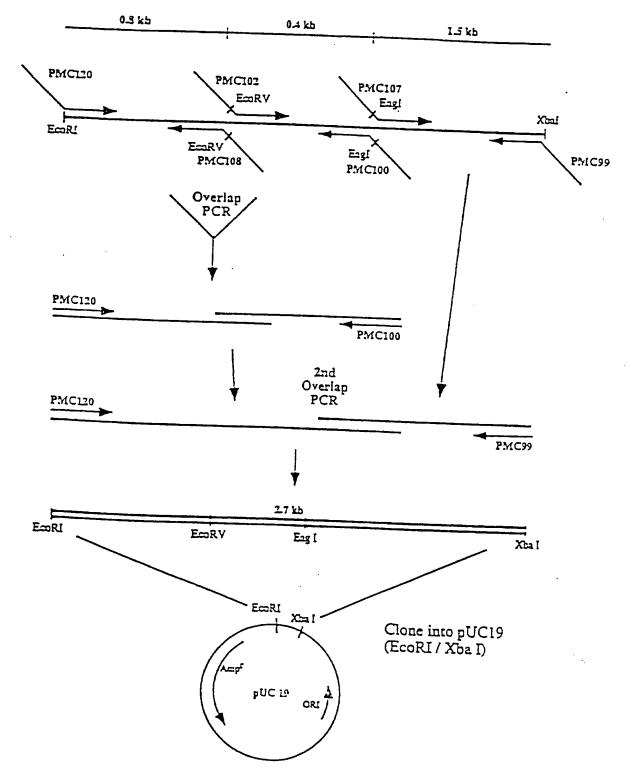
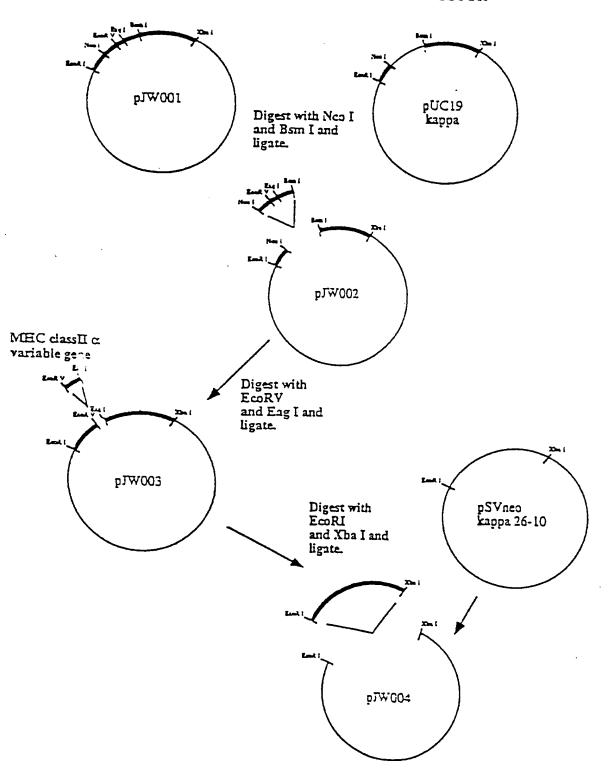


Figure 13. STRATEGY FOR CONSTRUCTING MHC CLASS IIc / KAPPA CONSTANT GENE IN MAMMALIAN CELL EXPRESTION VECTOR



rosoto ezenee

Figure 14. Primers used for Sequencing Mutated 2.7 Kb Fragment

Primer List	<u>Sequence</u>
PMC-33	[5GCTCAGCTGTCTTGTTTCAGTACTGATC3']
PMC-77	[FGTAAGTAGCGGCCG3']
PMC-111	[FGGTATGTAAAATAAACATCACAG5']
PMC-114	[FGCTTACGGAGTTACTG']

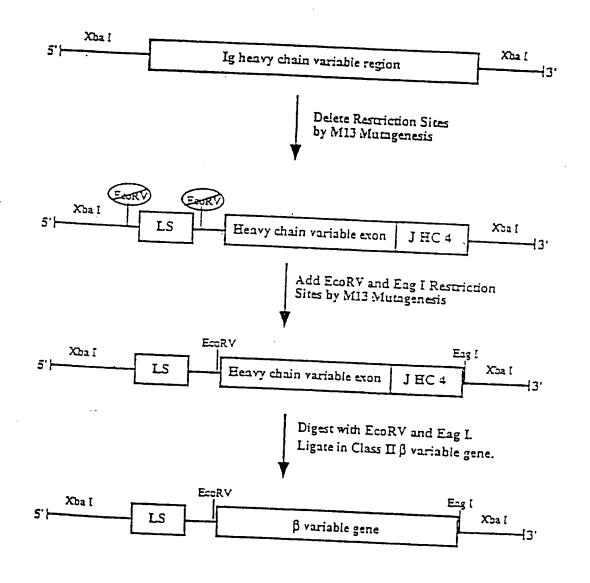
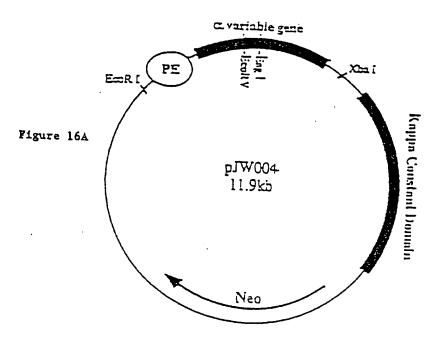


Figure 16. Final Vectors for Expressing MEC II / Ig Chimeric Proteins



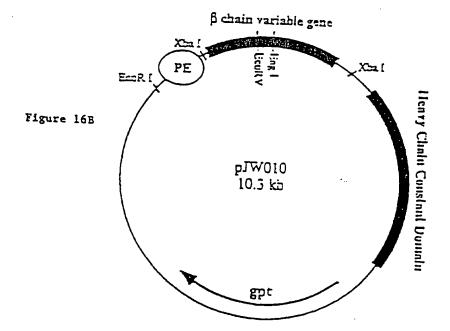


Figure 17 - Full length peptide linked MHC expression vectors

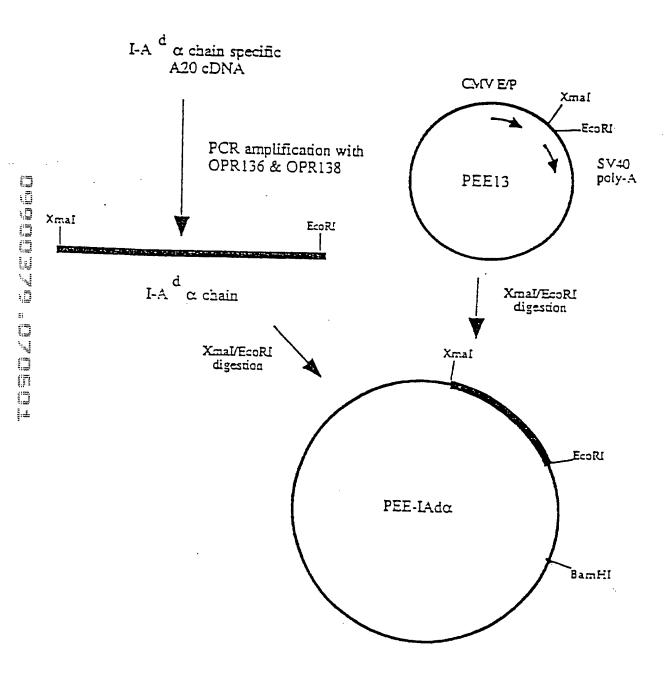


Figure 17 - cont.

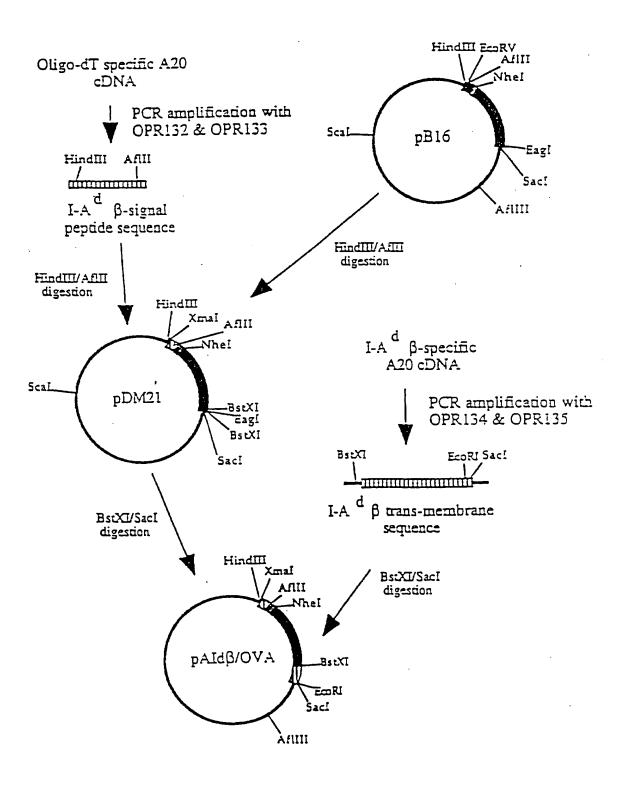


Figure 17 - cont.

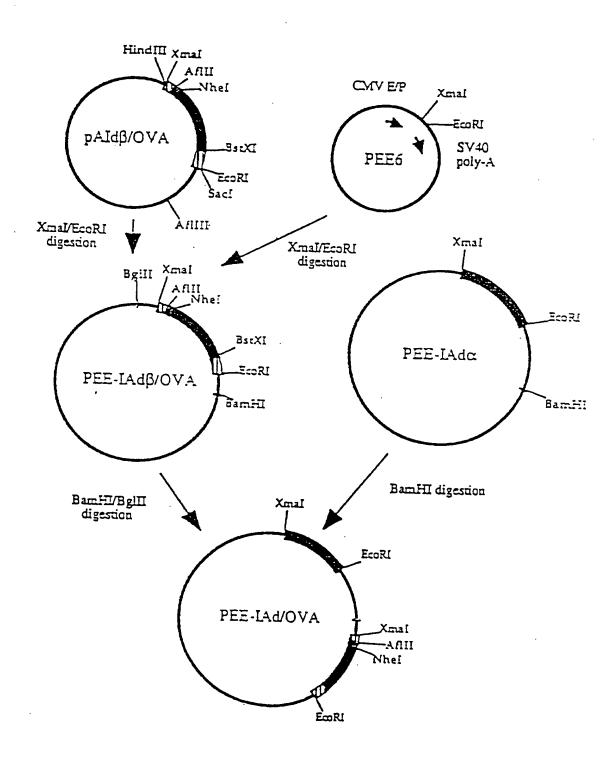




Figure 18A. Full length I-Ad a chain insert

Figure 18B. Full length I-Ad β chain insert

```
HindIII Year
          10
  אופטיים שמכיאכים אדם כביד כדים כאם אדם כדים אבר כדים כדים כדים דהא פרי
  אל א ב C ב P S L L E S A
             Kozak
                              I-Ad 5 chain signal peocide
           PRESENCE
                                        90 A£111
                   70
 פכי פונה פונה פונה אבים פונה פונה אפי אפי מונא אפי אינה בונא אפי אנה
 I-Ad 3 chain signal peptide
                                       Signal peptide
        110
 זכד כעם מבד מדד כעם מבד מבד כעם מבד פאן אדם אנם פאן מבד מבד מבד
                    120
S Q X Y H X X H X I I H I X G R
            Ove pepcide
  Mbel
          160
<u>60.1 NGC</u> COTY COTY COTY COTY COTY COTY THE LINE ON THE TA
                     170
Linker region
                                  I-Ad 5 chain
                               Ecoki Saci
870
          840
מבי מבי מבי מבי מני מני מני מני הבי אבי הדו אביושוני
מבי כבי כבי מני מני מני מני מני הני אבי הדו אביושוני
מבי כבי כבי מני מני מני מני מני אבי הדו אביושוני
                    890
 , , verrd.
                          $coq
        I-Ad & Chain
```

FIGURE 19 (Sheet 1 of 7)

Full length peptide linked MHC expression vectors

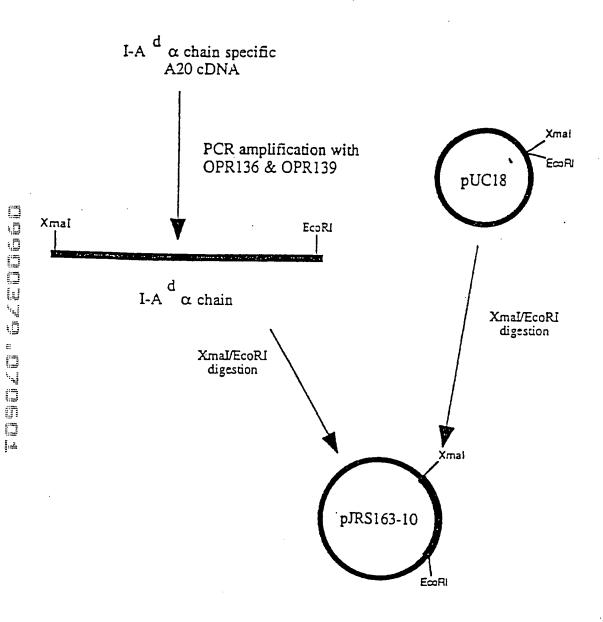




FIGURE 19 (Sheet 2 of 7)

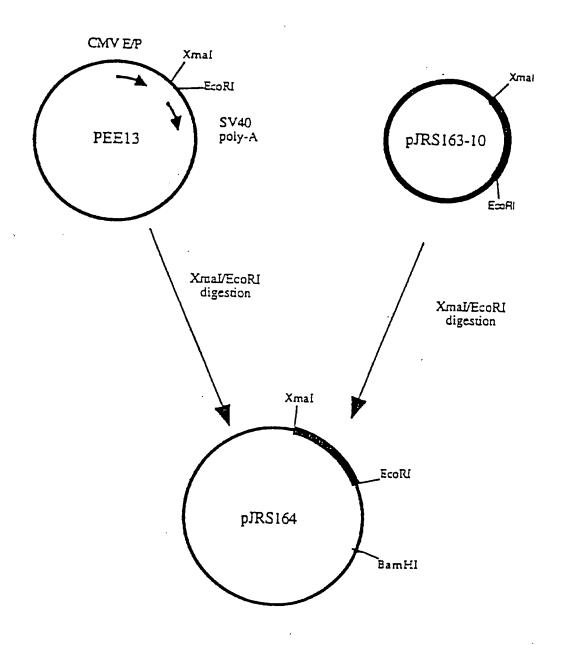
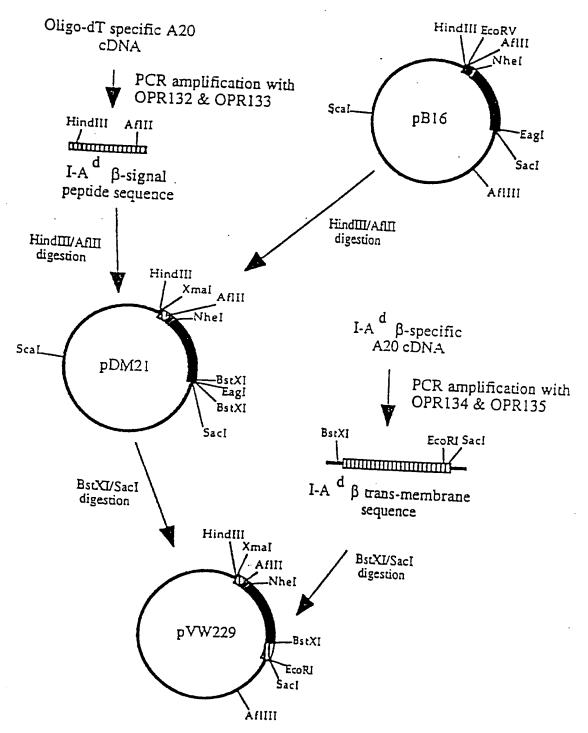
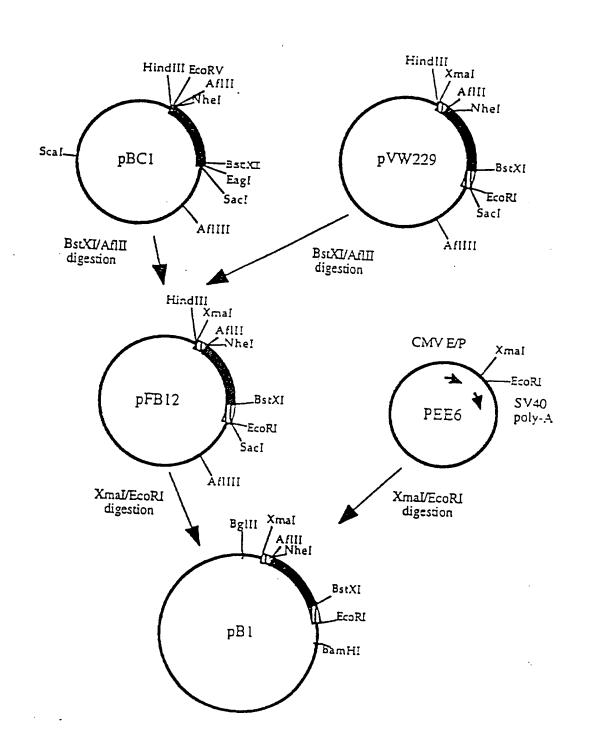


FIGURE 19 (Sheet 3 of 7)



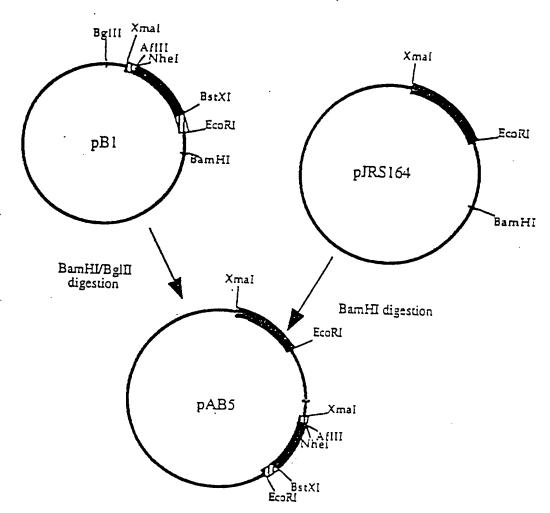


33/54 FIGURS 19 (Sheet 4 of 7)



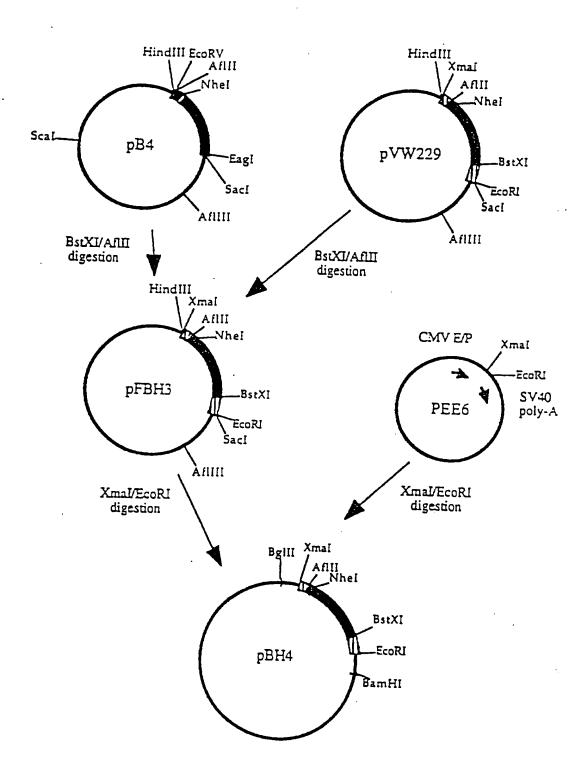


34/58 FIGURE 19 (Sheet 5 of 7)

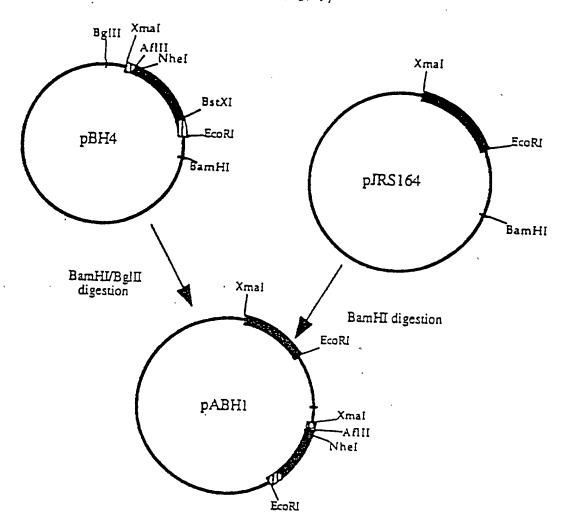


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35/59 FIGURE 19 (Sheet 6 of 7)



36/58 FIGURE 19 (Sheet 7 of 7)





Oligonucleotides used in cloning

OPR132

I-A^d β signal peptide front primer with Kozak consensus for CeilTech vector - HindIII/XmaI sites 5'-CCC CCC AAG CTT CCC GGG CCA CCA TGG CTC TGC AGA TCC CCA GC-3'

OPR133

I-A^d β signal peptide back primer with Kozak consensus for CellTech vector - AfIII site 5'-CCC CCC ACT TAA GGT CCT TGG GCT CAG CAC C-3'

OPR134

I-A^d β transmembrane front primer for CellTech vector - BstXI sites 5'-CCC CCC CCA TCA CTG TGG AGT GGA GGG-3'

. OPR135

-I-A^d β transmembrane back primer for CellTech vector - SstI, EcoRI sites 5'-CCC CCC GAG CTC GAA TCC TCA CTG CAG GAG CCC TGC TGG-3'

OPR136

I-A^d α signal peptide front primer with Kozak consensus for CellTech vector - HindIII/Xmal sites
5'-CCC CCC AAG CTT CCC GGG CCA CCA TGC CGT GCA GCA GAG CTC TG-3'

OPR139

I-A^d α transmembrane primer for CellTech vector - SstI/EcoRI sites
5'-CCC CCC GAG CTC GAA TCC TCA TAA AGG CCC TGG GTG TCT G-3'

B7-1-2F

Murine B7-1 front primer with Kozzk consensus for CloneTech vector - NotI site 5'-CCC CCC CCG CGG CCG CCC CAC CAT GGG ACT GAG TAA CAT TCT C-3'

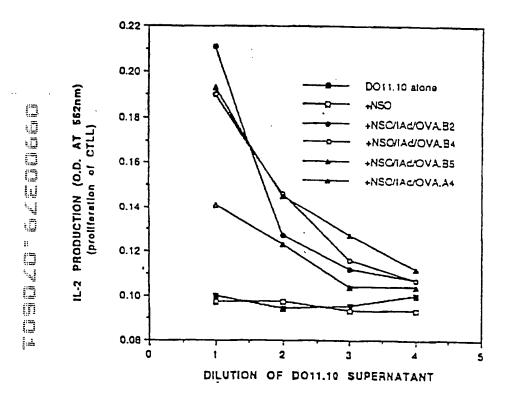
B7-1-2B

Murine B7-1 BACK primer for CloneTech vector - NotI site
5'-CCC CCC GCG GCC GCT TTA AAA ACA TGT ATC ACT TTT-3'



FIGURE 21

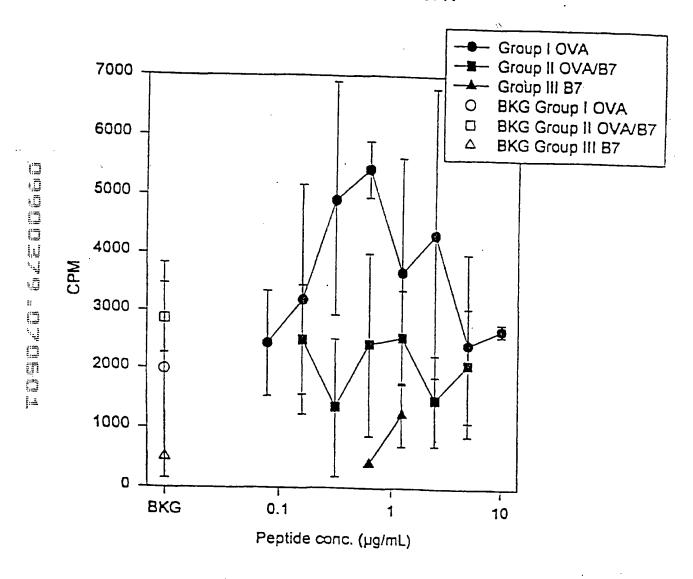
NSO/ClassII/OVA clones Stimulate IL-2 Production from DO11.10





39/54 FIGURE 22

INTRAMUSCULAR IAd/OVA & B7 DNA INJECTIONS PROLIFERATION ASSAY





40/5% FIGURE 23

NTRADERMAL IAd/OVA & IAd/HEL DNA INJECTIONS PROLIFERATION ASSAY 4, 7 & 14 DAYS POST INJECTION

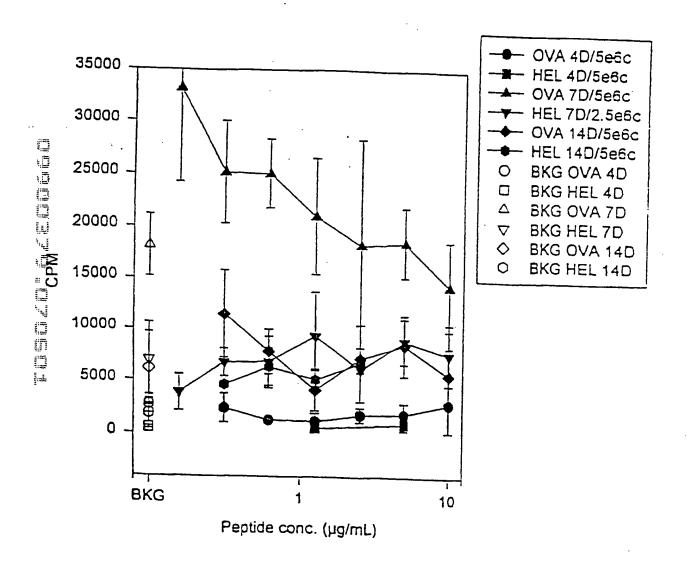




FIGURE 24

linker sequence linked to presenting peptide

peptide binding groove

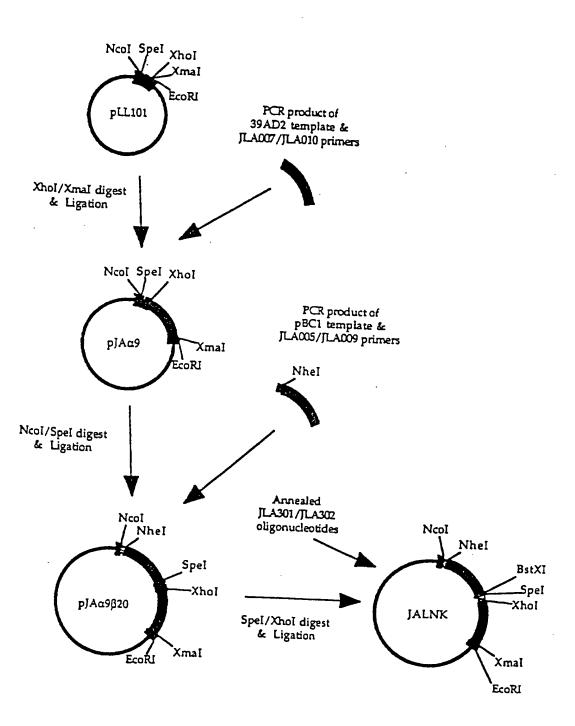


 $\alpha 2$ domain

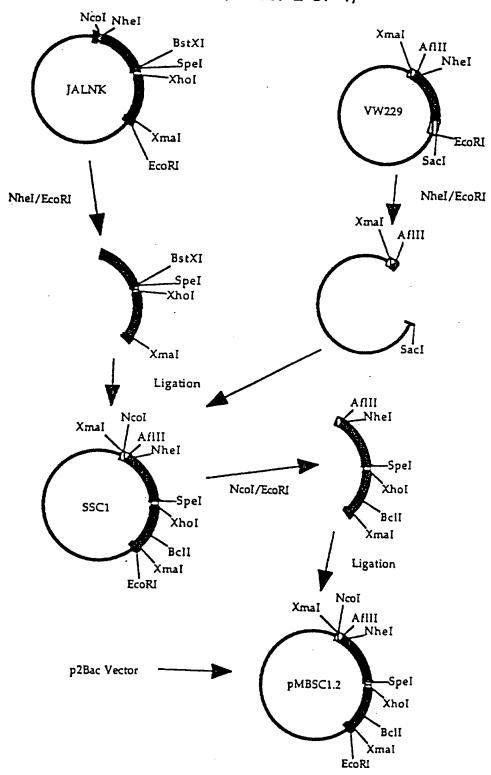
β2 domain

single chain linker sequence

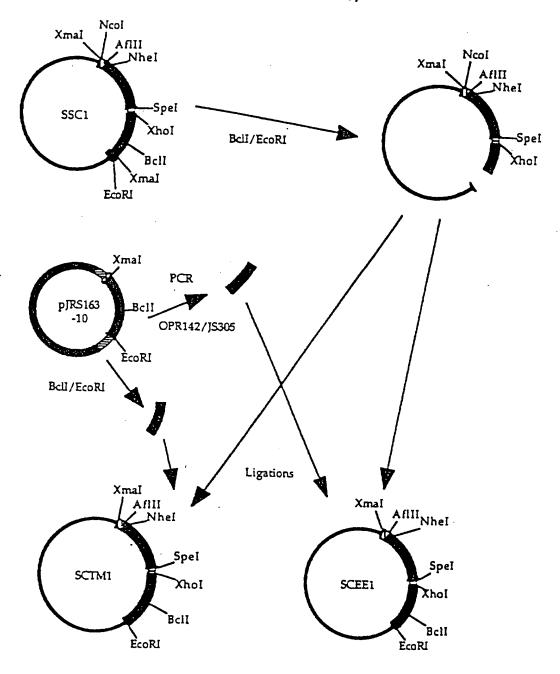
42/5% FIGURE 25 (SHEET 1 OF 4)



#3/5 8 FIGURE 25 (SHEET 2 OF 4)

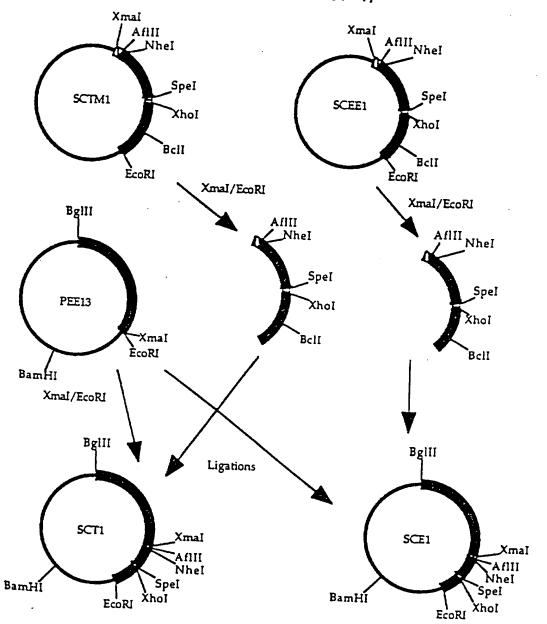


14/54 FIGURE 25 (SHEET 3 OF 4)





45/54 FIGURE 25 (SHEET 4 OF 4)



46/58 FIGURE 26

JLA-005

5'-CCCCCGCCATGGCCGCTAGCGGAGGGGGGGGAAGC-3'

JLA-007.

5'-CCCGGGGCCTCGAGTGAAGACGACATTGAGGCCGAC-3'

JLA-009

5'-CCCCCCACTAGTCCACTCCACAGTGATGGGGCT-3'

JLA-010

5'-CCCCCCCGGGACCAGTGTTTCAGAACCGGCTCCTC-3'

JLA-301

-5'-TCGAGGAACCGCCACCGCAGAACCGCCGCCACCGGA-ACCACCACCGCCGCTGCCACCGCCACCA-3'

JLA-302

5'-CTAGTGGTGGCGGTGGCAGCGGCGGTGGTTCCGG-TGGCGGCGGTTCTGGCGGTGGCGGTTCC-3'

OPR-142

5'-CTTGGGAATCTTGACTAAGAGG-3'

JS-305

5'-CAGGTCGAATTCTCATTCCATCGGCATGTACTCTTCTT-CCTCCCAGTGTTTCAGAACCGG-3'



47/54 FIGURE 27 (SHEET 1 OF 4)

		•														
		:	10			20			3	0			40			5
CCA	CC 3	TG (cr (erre d	באם :	ATC	CCC .	AGC	CTY	~~	مكنت	TC 3	СС-111 +		GTG	_
GGT	~ ,			me (- L	اعتدا	-	י סידו	GXC	GAG	GAG	ست لا	CC3	CC3	~1~	~ >
		F1	^	-	~		2	S	r.	7	*	_	•			
•		<					I-Ad	p c	nain	lea	der					
			60			70			8	0			90			
~~~			•							•			-			
CAC	CIG	TAC	. CX	. CIC	AGC	ACC		A ACC	S AC	C TT.	A AC	r at	c rc	т са	ے ور	T
V	L	M	v	L	. 100 S	S	P	1 1C(	i TGA mr	G AA	T TC	Y TA	SAG	y CI	ت در کی ک ک	λ
								•	<u>-</u> .			><-		Q		<b>&gt;</b>
100																
+			110			1	.20			130		•	14	0		
GTT	CAC	GCT	GCT	CAC	GCT	GA3	ATC	: <b>A</b> AC	: GA		r cor		,	•	c GG;	
	210	~~~		. 610			TAG	1777	. (77	, ~,						_
•	44	~	~		•	z.		N	F	2				_	_	
		OVA	323	-119									-><		G:	•
	50			160			170			1	80			190		
	•			•												
CCC	CCC	CCT	AGC	GCC	GGA	GGG	CCA	AAC	TCC	נגט	AGG	CAI	TIC	GTO	GTC	:
_	•	•	3	•		- 6		N			-				CAG V>	;
	10 8	umin	o ac	id 1	inke	r	><		I-	Ad B	-1 d	n omai	n -	· · ·	<۷ 	
	200												••			
	200			2.	÷			220			230			2	40	
CAG	TTC	AAG	GGC	GAG	TGC	TAC	TAC	100	AAC	GGG	ACG	CAG	000	י מייז א	· · ccc	
		110	~~~	- 1	~~~	ALL	ATIVE	117.7	441	~~~	m~~~	~~~				
Q 	F	K	G	Ε	C	Y	Y	T	N	G	T	Q	R	I	GCC R>	
	2	250			260			2	70		:	280			290	
<u></u>		•			•				•			_				
CTC GAG L	CAC	TGG	TCT	ATG	TAG	ATC	AAC	CCC	GAG	GAG	TAC	CIC	CGC	TAC	GAC	
L	v	T	R	Y	I	Y	N	R	E	E	A1G	CAC	GCG	XTG	CIC	
												· ·				
		3.0	0		,	10										
			•			•			320				30			
AGC TCG	GAC	CTC	GGC	GλG	TAC	CGC	GCG	CTC	ACC	GAG	CIG	GGG	CGG	CCA	GAC	
	~ 10		~~~	C . C	NIG.		CCC	C 7 C	TY		~ ~ ~					
		·			I	ĸ	λ	V	T	Ε	Ľ.	G	R	P	D>	
340			350			3 6	50		3	70			380			
GCC	GAG	TAC	TGG	AAC	AGE	CAC	•	c	<b>1</b> ~~	•			_			
CCC (	~	VIC	WC.C	110	TCG	GIC	CCC	~~	ጥነር	C3 C	~~~			CGG	GCC	
λ	E	Y	W	N	s	Q	P	E	I	L	E	R	T	GCC R		
											-		-			



#### #8/5% FIGURE 27 (SHEET 2 OF 4)

•				•
•	•	410	_	430
GAG GTG GAC A	CG GCG TGC AC	A CAC AAC TA	יכ פאפ פפפ ככם	GAG ACC AGC
2 V D 1	r a c r	H N Y	E G P	E T S>
			~~~~~~	
440	450	460	470	
•	•	•	_	480
ACC TCC CTG CC	e cee cal ey	א כאם ככב אאי	T GTC GCC ATC	שני בשני שנים
	is one and the	I will be a recommendation of the contract of	3 616 666 656	
		U P N	17 1 -	
I-Ad β-1	GCEFIN -><	I-λd	β-2 demain -	
490	500	510		
•	· •	•		530
AGG ACA GAG GC	C CTC AAC CAC	CAC AAC ACT	יים פור וויים	TCC CTC 3.C3
R T E A	L N . H	H N T	L V C	S V T>
540	550	560		
•	*	_	•	
GAT TTC TAC CC.	A GCC AAG ATO	AAA GTG CGC	TGG TTC AGG	NAT COC CAC
D F Y P	ARI	K V R	WFR	N G Q>
580 590	0 6	30	£10	
•		*		520
GAG GAG ACA GTO	G GGG GTC TCA	TCC ACA CAG	CTT ATT AGG I	13T CCC C3C
E E T V	G V S	S T Q	LIR	N G D>
630	640	650	650	e
•	•	•	_	670
TGG ACC TTC CAC	erc cre cre	ATG CTG GAG	ATG ACC CCT C	AT CAG GGA
W T F Q	V L V	HLE	и т р	H Q G>
680	690	700	71,0	720
•	•	•		720 •
GAG GTC TAC ACC	TGC CAT GTG	GAG CAT CCC	AGC CTG AAG A	
			S L R . I-Ad β-2 doma:	in
730	740	750	760	774
•	•			770 •
ACT GTG GAG TGG	ACT AGT GGT	GGC GGT GGC	AGC GGC GGT GG	ST GGT TCC
TVFU	Т с с	CCO CCX CCC	TCG CCG CCA CO	CA CCA AGG
T V E W		G G G	S G G (G S>
-		24	amino acid lin	nker



FIGURE 27 (SHEET 3 OF 4)

			780			79	0		8	00			810		
GG	T GG	:c cc	ic co	יי יי	T C	<u>.</u> ~	• ~~ ~~			•					•
															AC ATT KAT DI
G	G	G	G	S		. (; (3	S ;	S S	A C	ייני פרייניי	נפ כ	TG TAA
~- .												-><-			D I>
820			83	0			840	•		850			86		
GAC	GC	C GA	כ כא	C GT	λGG	c m	י גיד בי	ጥ ርና	-T 30	•	•		_	•	n cci
_		_		•	•	F			. 7		• ••	Λ Λι Υ	, G	ر ع <i>د</i>	ia gga P>
~	;	I-Ad	a-1	dom	ain										
8	70 •			880			89				900			910	
CCY	GAC	AT.	r GGC	CAC	TAC	- AC	3 (31	- r c:	٠		•			•	G TTC
G	D	I	G	Q	Y	T	H	Ε	F	מ	λ (C,	CT)	A CIT	C AA	C AAG F>
	920			9	30			940							
•	•										950				
TAT	CIC	GAC	TTG	GAT	. A AC	AAC	AAA S	ACT	. GI	TG	a AGG	. C M	٠ ح	1 636	TTT
	·	- -		D	Х	_ K	ĸ	T	V	W	R	L	P	E	F>
		970			980			9			1	000			1010
GGG	C23	-Aria-	3773	~~~	*				•			•			•
CCG	CIL	AAC	TAT	GAG	AAA	CYC	. ccc	CAA	GGT	, CCY	ctc	CYY	AAC	ATA	GCT CGA
G	Q.	L	I	L	F	E	P	Q	G	י ככז	' GAC	CIT	TIC	TAT	CGA
													~		A>
		10	20		7	020			.						
			•			•			_			10	50		
GCA	Gλλ	AAA	CAC	AAC	TTG	GGA	ATC	TIG	3 ~		AGG	ጥር ነ	337		100
			# 	•••	-	•	-		T		•	_		_	_
				•					I	-Ad (α-1 d	loma i	in -		
1060		;	1070			10	80		1	090		1	100		
	مئات	300	***	~~~			•	_							
CCA CCT P	CGY	TGC	TTA	CTC	CCT	CCT	CYY	CCC	ACT	ara	TTC	CCC	AAG	TCC	CCT
P	A	T	N	E	A	P	0	1	TUA	CAC	YYC	ccc	TIC		
		;	·<	1	DA-1	α-2	doma	in		·		r 	K		
111															
	•			•			130			114				50	
CTG (cic	CIG	CCT	CAG	CCC	AAC	N.C.C		ATC	TC-~	ىئىلى <u>ل.</u> 4	حدث	C10	•	\ #c
CAC (GAC	GAC	CCY	GTC	ಽಽಽ	TTC	TCC	G۸۸	TAG	ACG	AAA	CAC	CTG	TTC	ATC TAG
	L 	L.	G	Q	P	N	T	L	I	C	F F	V	D	N	I>



FIGURE 27 (SHEET 4 OF 4)

1160 TTC CCA	CCT GTG AT	- 330 37-	101	1190	•
ANG GGT	GGA CAC TA	G TIG TAG	TOT ACC	TC AGA AAT AGC AG TCT TTA TCG	ANG TON GTO
F P	PVI	N I	T W	AG TCT TTA TCG L R N S	TTC AGT CAG
	~~~~~~				K S V>
12	10	1220	1230		
	•	•		14	1250
ACA GAC	GGC GTT TAT	GAG ACC	100	· · ·	•
TET CIG	CCG CAA ATA	cic icc	TCG AAG G	e cyc and cel (	CAC CAT TCC
7777	G V Y	ET	SPI	C CAG TTG GCA (	D F C
					- " 3>
	1260	1270	120	0 1290	
	•	-	120	1290	
ATC CXC	UAG CTG TCT	TAT CTC	300	-	
F H	TTC GAC AGA	ATA GAG	TGG AAG TA	C CCT TCT GAT G GGA AGA CTA C	TA CTG TEA
	A L S	Y L	T F I	P S D	D D I>
1300	1310	1320	) ,	.330 13	
73m es e	•	•	, '	13.	40
ATE CTC A	GC ANG GTG	GAG CAC I	יכם כככ כדם	GAG GAG CCG G	יים איז
YD	C K V	cic cic y	ככ ככם פאס	כעכ כעכ פפט פו פאפ פאפ ככפ פי	A GAC TTT
			1	-Ad a-2 domain	
1350	1360	13	70	1380	
	•		•		
GTG ACC A	es ecc cc;	AGT CAC C	AT CAC CAT	CAT CAC TAG	
н ъ	S R A	ICA GIG G	TA GTG GTA	GTA GTG ATC	
><		(	n n H 5 X HIS tad	H H +>	



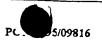
## 5//5% FIGURE 28 (SHEET 1 OF 4)

			10			20				30							50
CC	אככ	ATG	GCT CGA	crc	CAG	ATC	CCC	AGC	٠,	•	-		•				•
GC	TCC	TAC	CGA A	GAC	GTC	TAG	GGG	TCG	GAG	GAG	GAC	TCA	CG	. CC.		TC	CIC
		М	λ	L	Q	I	P	S	L	L	L	S	A	 A	٠ ر	これに ひ	CXC
		<					I-A	dβ	chai	n le	ader					· 	
			60			70		٠									
~			•			,	•			_							
CA	C CI	G AT	G GI	ב כו	G AC	ic ac	3C C	ZA AC	GG A	C T	ra ad	ST A	rc r	cr c	λG	GC7	•
v	L	M	C CA V	L GA		.G IT	ig Go	T TY	C T	נג פב	AT TX	CA T	AC A	Gλ G	TC	CG	
												5 ] •-≻≺-	נ <u>י</u>	S	Q	ىلا	•
100				_													•
100			11	0 <del>•</del>			120			130	)		14	10			
GT	ר כאנ	c GC	T GC A CG	r ca	c <b>c</b> c	T CA	3 80	~ ··			•	_		•			
Cλί	GT	CG	A CG.	y CIV	s cs	A CT	T TA	STI	ינים ביו ינים ביו	T CO	T CC	T CC	T GC	TA	30	GGA	
		002	A 32:	3-33	; ~								-><-				
1	.50			160			17	G			100						
	•			•				•			180			190			
CCC	GGG	GG	AGC	GG	GG	A GG	G GG.	A AA	CTC	c, Ga	A AG	G CA	T TT	C GT		GTY-	
G	G	, CC;	TCC	; CC(	CC	יייייייייייייייייייייייייייייייייייייי	ב ככ	LII	G AG	CT	T TC	C GT	A AA	G CA	c	CXG	
	10	amin	5 10 ac	id ]	ink	=:	-><-	N 	. S	E	. R	. н	F	V	•	V>	
													in -				
	200			2	10			220			230	נ			24	0	
CAG	TTC	AAG	GGC	GAG	TOO	T30		•			•	•			,	•	
GTC	AAG	TTC	CCG	CTC	ACC	ATC	ATC	TGC	. AAC	GGC	ACC	CAC	CGC	AT.	A (	CGC	
Q	F	K	G	E	С	Y	Y	T	N	G	- 160 T	. GIT	: GCC	TA'	rc	3CC	
											·	·					
		250			260			2	70								
		•			•							280				90	
CIC	CTC	ACC	AGA TCT	TAC	ATC	TAC	AAC	CGG	GAC	GAG	TAC	GTG	ccc	TAC	: 0	ac	
L	v	T	TCT	ATG	TAG	ATG	TTG	CCC	CTC	CIC	ATG	CAC	GCG	ATC	; c	TC	
			R						E 	_ E	Y	V	R	Y		D>	
		_															
		3 (	00		:	310			320			3	30				
AGC	GAC	GTG	CCC	GAG	TAC	ccc	GCG	CTY	300	<b>61</b> a			•				
TCG S	CIG	CAC	CCG	CTC	ATG	GCG	CGC	CAC	TGG	CTC	CIG	GGG	CGG	CCA	G	λC	
	D	V	G	E	Y	R	λ	v	T	E	L	G	R	P		1G D2	
																<b>-</b> -	
340			350			3 6	50		•	370			300				
•	<b>~</b> 1~		•							-			380				
<b>CC</b> C	CTC	TAC	TGG	AAC	AGC	CAG	CCG	GAG	ATC	CTG	GAG	CGA	ACG	ÇGG	G	:c	
CCC A	E	Y	W	N	S	O.	CCC.	t CIC	TAG	GYC	CIC	GCT	TGC	GCC	CC	×	
						·					E	R	T	R	,	<b>L</b> >	
																•-	



### 52/58 FIGURE 28 (SHEET 2 OF 4)

390		00	410			•
•						430
CIC CYC (	FAC ACG ( TTG TGC (	GCG TGC	AGA CAC	AAC TAC C	NG GGG CC	G GAG ACC AGC C CTC TGG TCG
E V	D T	λC	R H	N A	E G P	E T S>
440		450	4	60	470	480
ACC TCC (	era caa a	.स्टा टामा (	333 C3C	•		TCC CTG TCC
_	,	** **	<b>=</b> U	P 12	17	
	p-1 com	ain ->≺		I-Ad B-:	2 domain	S L S>
	0	500			520	530
AGG ACA G	AG GCC C	TC AAC C	AC CAC I	LAC ACT C	יים בידר ידרים יי	TCS GTG ACA
			н н	N I	v c	S V T>
	540		_			
	540		▼	560	5	
GAT TIC T	AC CCA G	א מגא סכ	TC AAA G	דה ככב דם	E TTC AGG	AAT GGC CAG
						AAT GGC CAG TTA CCG GTC N G Q>
			-		' F R	N G Q>
580	590		600	610		•
* C1C C1C 1	•		•	_		620
						AAT GGG GAC TTA CCC CTG
E E 7	· v c	5 V 5	s s '	I Q L	A TAA TCC I R	TTA CCC CTG N G D>
630	640		650	1	560	670
TGG ACC TT	י רב אם פיז	, הכנת כי	• ~ .m. ~	~ 0.0	•	•
~	. G A	LV	M I	E M	T P	GTA GTC CCT H Q G>
680		•	700	,	710	720
GAG GTC TA	c acc to	C CAT GT	ر	T CCC AGO	CTG AAG	AGC CCC ATC
E V Y	OK DOT D	G GTA CA	כ בנכ כז	y cee tee	GAC TTC	AGC CCC ATC TCG GGG TAG
		•••	- n		7 5	TCG GGC TAG S P I> ain
730		740	•	750		
•		. 40			760	770
100		-			•	•
ACT GTG GA	G TGG AC	T ACT CC	T GGC GG	T GGC AGG	GCC GCT (	ST GGT TCC
TVF	W T		× cc3 cc	A CCG TCS	CCG CCA (	GGT GGT TCC CCA CCA AGG G G S> Lnker



# 53/58 FIGURE 28 (SHEET 3 OF 4)

		780			79	a			800			01	•	
CC-Tr /	· .	~~ ~.				•								
CCA (	ecc c	בני נו	FT TC	T GC	:C G	CT G	GC (	CT	TCC	TCG ;	NGT (		iac (	GAC ATT
G	G	G	S	7 6	: .	כא כו ה	בנו כ ב	:CA .	YCC	AGC 1	CY C	TT	mc d	D I>
						- '	_	G	>	5	S	E	D	D I>
924											><			
820		83	0			840		_	8	50		8	60	
CYC C	בכ ב	3C C3	C GT	3 66	~ ~~	* **				•			•	
circ c	CG C	rc cr	יל כאי	r cc	G A	ic Ty	rr G	Gr ;	ACA J	CT G	TT T	AT C	AG I	CT CCT
E	A I	э н	v	G	F	~ ^ Y	· ·	C CV 1	ab rerial	CA C	AA A	TY C	TC A	CA CCA S P>
	I-Ac	α-1	dom	ain					·		v 	¥ 	Q	S ?>
870														
•			880			89	0			900			91	0
GGA G	AC AT	T GG	CAC	TAC		3 (3)	• • ^:			•				•
CCT C	TA TA	A CC	GIC	ATC	TG	T GT.	ים ב	CAT PT 3	TT G	AT GO	er Gr	T G	C T	• IG TTC AC AAG
G 1	) I	G	Q	Y	T	H	E		AA C	וא כנ ה	בא כז	א כי	K Y	AC AAG L F>
												,		- F>
93	20			20		•								
	•			•			_			9 5				960
TAT GT ATA CA	C CA		GAT	AAG	AAC				~ ~		•			•
ATA CA	CT	G AAC	CTA	TIC	TTC	TIT	TG	A C	ic at	KG AG	S CT	TCC	T GA	C LLL
Y V	D	L	D	x	ĸ	K	T	<u>.</u> ,	r v		C GA	A GG	y CI	C AAA F>
													± 	F>
	970			980			,	990			1000	•		
CC2				•				_			1000			1010
CCC CT	A TTC	ATA	CTC	LIL	GAG	CCC	CA	/ cc	T GG	A CT	دی ت	A AA	C AT.	A GCT
CCG GT G • Q	L	- IAI	GAG T.	AAA	CTC	GGG	CIT	מ ככ	y cc	T GAG	C GT	r TT	G TA	T CGA
G .Q				·			Q 	G 	G	L	Q	И	I	A>
	10	20		10	030			104	ა		10	50		
GCA GA	A A 3 3	CAC	220	<b></b>	-		_	•	•					
GCA GA CGT CT A E	r TTT	GTG	TTG	330	CCT	TIC	TTG	AC	r aa	S AGO	גסד:	. AAT	TIC	ACC
λE	x	H	N	L	G	ī	L	. 1G,	A TTY	c TCC	AGT	TT	AAC	TCG
		:						<u>1</u>	A DA-1	α-1	dema	. N	F	T>
1060											CCIIIA	111		
•		1070			108	80		1	1090			1100		
CCX GCT	, ycc	AAT	GAG (	CCT	ححت	CAA		,	•			•		
GGT CG	TCC	TTA	CTC	CGA	CGA	GTT	CCC	ACT	GTC	TTC	CCC	AAG	TCC	CCT
Р д	T	N	E	A	P	Q	λ	T	U CAC	- AAG	ccc	111C	AGG	GGA
		><	I	-Ad	α-2	doma	in		<u>:</u> .	·				¥>
1110														
•			•			130				40		1		
CYC CYC	CTG	GGT	CAG	cc .	AAC			ATC	<b>~</b> ~~	•			•	
CYC CYC	CYC	CCA	GTC (	CC 4	TTC	TCC	GAA	TAG	ACC	All	GTG	GλC	AAC	ATC
V L	L	G	Q	P	N	T	L	I	C	F	V	ביני	N	TAG T>



# FIGURE 28 (SHEET 4 OF 4)

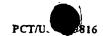
	116			1	170			1	1180	)			1190	1			,	700	
سكنمك	٠			~ ·-	•				•	•			,	•			_	200	
AAG	GC.	20 A	. G	CON	C A	AC A	ITC	ACA	י זכ	Σ C	TC	λGλ	AAT	r ac	C	AAG	TC	A G	r_
F	P	r GG. P	יי ע	, I		M TC 1		TCT	. AC	C G	AC.	TCT	TT	TC	:3	TTC	YC	rc	S
		P				., 	·	T	W 		L	R	И	S	;	ĸ	s	V	<b>/</b> >
	3	1210			12:	20			1	230			1	240					
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ACA ACA	GAC	GG(	: CT	T TA	TG	K DA	CC	AGC	TT	c c	rc	CTC	AAC	CG	T (	GAC	CAT	· T	_
ъ. 101	Cit	CCC	i CA.	A AT	λ C	C T	GG -	IC3	λλ	G G	C	ಯ	TIC	GC	λ	CTG	GTZ	AG	S
		G	٧				T	S	F	I	_	v	N	R		ם	H	S	>
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TTC	CAC	AAG	CTO	TC	בידי יו	$T \sim$	~	3/	****	• •									
F	H	K	L	S	Y	Ī		T	F	I	•	P	5	CIN		D.	CIG	TA	A.
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1300		TGC				_													•
•			# 1310			1	.320	)			133	0			13	40			
TAT	GAC	TGC	220				~ ~	~-			_	•				•			
TAT ATA Y	CTG	λCG	TTC	CAC	CT	COT	יר א			CIA	G G	λG (	GAG	CCG	G	TT (	cic	۸۸۸	
Y	D	С	K	٧	E	н		w	CCG	UA(		.TC (	cic	GGC	C	AA (	SYC	LLI	•
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135	•		1	360			13	70				1380	)			139	a a		
CAC '	777	C2.2	CCT	C1C	3 ~~			•				1	,				•		
CAC (	ACC	CTT	CCI	C40	The		a G	CC (		ATC	ı.	CA C	AG (	CTG	A	CA C	AA	ACT	
GTG ;	N	Ε <	P	E	T	ם י	٠ -	ر ع	~~~ B	TAC	: A	ST C	TC (	GAC	T	ST C	TT	TGA	
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14	100			14	10			142	20			14	30				14.	^	
CTY: C	•	ייי:יי			•				•				•				T 4 4	•	
Cyc c	v	ACA	2	GAC.	CCC	AAC	: A(	5% C	:\C	ccs	C)	u c	AC C	:CG	TA	ے ع	λC (	באכ	
v 	·							<b>S</b>	V	G	I	•	V	G	I	. '	V	<b>V&gt;</b>	
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GGC A	100 s	MIC		ATC	ATT	CYY	, GC	ic c	76	CGY	TC	λG	GT G	GC	AC	c T	C 3	Gλ	
CCG T	T.	I.	F	I	TAA	CIT		:5 G	λC (	CCL	AG	TC	כא כ	CG	TC	G A	ಜಾ	CT	
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		160	•																

1500

CAC CCA GGG CCT TTA TGA
GTG GGT CCC GGA AAT ACT
H P G P L *>
- I-Ad a-TH domain ->

# 55/5 FIGURE 29 (SHEET 1 OF 4)

			10			20			3	•			40			
CC.	ACC A	ATG C	CT C	CTG (	EAG :	ATC (	CCC	AGC	CTC	CTC	CTC	TCA (	ccr (	cct	GTG G	TC.
		**	~		¥	-	r	2	L	L	T.	~	3.	*	CYC C	
		<				:	I-Ad	βc	lain	lead	ler					
			60			70			8	0			90			
GTC	CIC	) ATC	GTC	: CTG	AGG	AGO	cc	a ag	3 AC	- IT:	A AG	TA 7	·	ר כאנ	GCT	
			. –~	. ~~~		- 11	منسا د	i. 11.	. 44		T (T)	-			GCT CGA <a< td=""><td></td></a<>	
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100			110	ı		1	.20			130			140	)		
GIL	' CAC	GCT	GCT	· CAC	GCT	, פאס	• ATC	. 330						, 	: GGA	
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•	**	^	~	-33è		- 2	1	N	F	A			•	_	_	
	50				•											•
	•			160												
CCC	CCC	GGA	AGC	GGC	GGA	CCC	CCY	AAC	TCC	GAA	AGG	САТ	TTC	GTG	GTC	
G	G	G	S	G	G	G	G	TIG N	ACG	CLL	TCC	GTA	AAG	CAC	CAG	
	10	amino	o ac	id l	inke	r	><		I-	Ad B	-1 d	omai:	n -			
	200			2	10		٠.	220			230			2	40	
CXC	IIC	AAG	GGC	GAG	TGC	TAC	TAC	ACC	230		100				•	
	~~~	110			NCO	W . C	ALC	TGG	Jale:		~~		~~~		GCC	
	F 	K 	G 	E		Y 	Y 	T	N	G	T	Q	R	I	R>	
	•	350			360											
		250			260				•			280				
CTC	GTG	ACC	AGA	TAC	ATC	TAC	A 3.C	ccc	C1 C	~ ~ ~		•			•	
	GTG CAC	ACC TGG	AGA TCT	TAC ATG	ATC TAG	TAC	AAC TTG	CCC	exe exe	GAG	TAC	GTG.	CGC	TAC	ÇAC	
	GTG CAC	ACC TGG	AGA TCT	TAC	ATC TAG	TAC	AAC TTG	CCC	exe exe	GAG	TAC	GTG.	CGC	TAC	ÇAC	
	GTG CAC	ACC TGG T	AGA TCT	TAC ATG	ATC TAG I	TAC	AAC TTG N	CCC	CTC E	GAG	TAC	GTG.	CGC GCG R	TAC	ÇAC	
L	GTG CAC V	ACC TGG T	AGA TCT R	TAC ATG Y	ATC TAG I	TAC ATG Y	AAC TTG N	CGG GCC R	GAG CTC E	CAG CTC E	TAC ATG Y	GTG CAC, V	CGC GCG R	TAC ATG Y	GAC CTG D>	
L AGC TCS	GTG CAC V	ACC TGG T	AGA TCT R	TAC ATG Y	ATC TAG I TAC	TAC ATG Y	AAC TTG N	CCC GCC R	GAG CTC E 320	GAG GAG	TAC ATG Y	GTG CAC, V	CGC GCG R	TAC ATG Y	GAC CTG D>	
L AGC TCS	GTG CAC V	ACC TGG T	AGA TCT R	TAC ATG Y	ATC TAG I TAC	TAC ATG Y	AAC TTG N	CCC GCC R	GAG CTC E 320	GAG GAG	TAC ATG Y	GTG CAC, V	CGC GCG R	TAC ATG Y	GAC CTG D>	
AGC TCG S	GTG CAC V GAC CTG D	ACC TGG T 30 GTG CAC V	AGA TCT R	TAC ATG Y GAG CTC E	ATC TAG I TAC ATG Y	TAC ATG Y 310 CGC GCG	AAC TTG N GCG CGC A	CCG GCC R CTG CAC V	GAG CTC E 320 ACC TGG T	GAG GAG CTC E	TAC ATG Y	GTG CAC, V	CGC GCG R O + CGC GCC	TAC ATG Y	GAC CTG D>	
AGC TCG S	GTG V V GAC CTG D	ACC TGG T 30 GTG CAC V	AGA TCT R 00 GGC CCG G	TAC ATG Y GAG CTC E	TAC ATG	TAC ATG Y 310 CGC GCG ·R	AAC TTG N GCG CGC A	CCG GCC R CTG CAC V	GAG CTC E 320 ACC TGG T	GAG CTC E GAG CTC E	TAC ATG Y CTG GAC L	GTG CAC, V	CGC GCG R O CGC GCC R	TAC ATG Y CCA GGT P	GAC CTG D> GAC CTG D>	
AGC TCG S	GAC CAC V GAC CTG D	ACC TGG T 30 GTG CAC V	AGA TCT R GGC CCG G	TAC ATG Y GAG CTC E	ATC TAG I TAC ATG Y AGC TCG	TAC ATG Y S10 GGG GGG 'R CAG GTG	AAC TTG N CCG CGC A	CCC GCC R CTC CAC V	GAG CTC E 320 ACC TGG T	GAG CTC E GAG CTC E	TAC ATG Y CTG GAC L	GTG CAC, V 33 GGG CCC G	CGC GCG R CGG GCC R	TAC ATG Y CCA CGT P	GAC CTG D> GAC CTG D>	
AGC TCG S	GAC CAC V GAC CTG D	ACC TGG T 30 GTG CAC V	AGA TCT R GGC CCG G	TAC ATG Y GAG CTC E	ATC TAG I TAC ATG Y AGC TCG	TAC ATG Y S10 GGG GGG 'R CAG GTG	AAC TTG N CCG CGC A	CCC GCC R CTC CAC V	GAG CTC E 320 ACC TGG T	GAG CTC E GAG CTC E	TAC ATG Y CTG GAC L	GTG CAC, V 33 GGG CCC G	CGC GCG R CGG GCC R	TAC ATG Y CCA CGT P	GAC CTG D> GAC CTG D>	



56/58 FIGURE 29 (SHEET 2 OF 4)

3	90			400			410)			120			430	
GAC	CIC	GLC	ACO	G	: TY:	. 303		•			•			•	
6.50	CYC	CIG	TGC	CCC	: ACG	TCT	. GX	TT	: ATY	- CTY			~~~	- ~~-	
E	` v	D	T	λ	C	R	Ħ	N	Y	Ε	G	P	E	T	, icc
	440			4	50			460			470)		4	80
	•				•			•	•		470				
TGG	TCC	CIG	CGG	CCC	CIT	GAA	CAC	CCC	: AA1	. CIC	GCC	ATC	TCC	cro	TCC
T	AGG S	L	R	R	L	Ε	0	P	N	v	a	7	-		~ .
	I-	Ad B	-1 d	omai	n -	×		- Ī	-Ad	β-2	doma	in			 -
		490			500			5	10			520			
AGG	λςλ	GAG	GCC	CTC	AAC	CAC	CAC	AAC	ACT	CTG	GTC	4	ت کف	CTY	• •
200	TCT	CIC	CCC	GAG	TTG	GTG	CTC	TTC	TGA	GAC	CAC	3.03	300	C3.C	T-3
- X	T	E	λ 	L	N 	H	H	N	T	L	v	c 	S	V	T>
		5	40		!	550			560			5	70		
Gam	سكتمك	T . C	*		310	3000			•						
CTA	TTC AAG	ATG	GGT	CGG	TTC	TAG	TTT	CYC	CGC	TCC	TIC	ACG	AAT	GCC	CAG
D	F	Y	P	λ	ĸ	I	ĸ	v	R	W	F	R	N	G	0>
580			590			60	סכ			510			670		
•			•				•								
GAG	cyc	λCλ	CTC	GGG	GTC	TCA	TCC	ACA	CYC	CTT	ATT	AGG	AAT	ಽಽಽ	GAC
E	CTC E	T	V	G	CYC:	AGT	AGG	TCT	CLC	CYY	TAA	TCC	TTA	CCC	CIC
								<u>-</u>							D>
۶.	30			40											
٥.	•		•	*			650			6	50		6	570	
TCC	λCC	TIC	CXG	CTC	CTG	GTC	ATG	CTG	CAC	λTG	ACC	CCT	CAT	CAG	CCA
WC.C	100	تكلف	CIC	CAG	GAC	CXC	TAC	GAC	CTC	TAC	TCC	CCA	CTL2	~	
w 	T	F	Q		L		M	L	E	H	T	P	H	Q	G>
	680			69	0		7	00			710			72	0
GAG	CIC	TAC	ACC.	TCC	Car	ביצים	CIC	•			•				•
C1C	سلاب	ALG	.100	ACC	CIA	CAC	CIC	GTA	GGG	TCG	CAC	-ALAL	~~~		71.0
		•								T - 3 -	9 ₇		,		
	v 									1-M	. p-2		win		
		30			740			75		1-M			wain		
	 7	30			740			75	•		7	60			770
ACT	7 GTG	30 GAG	TCC	ACT	740	GGT	GGC	75 GGT	60C	AGC	7	60	com	ccr	770
ACT TGA T	 7	GAG CTC E	TGG ACC	ACT TGA T	740 AGT TCA	GGT CCA	GGC CCG	75 GGT CCA	600 600 600	AGC TCG	GGC CCG	GCT CCY	CCY	CCA	770 TCC AGG



FIGURE 29 (SHEET 3 OF 4)

		-		• /
	780	790	800 .	310
GOT COO		•		
CCY CCC	GGC GGT TCT GGC	COT CCC CCT	TCC TCG AGT GAS	GAC GAC ATT
GG	CCG CCA AGA CCG G G S G	e e e	AGG AGC TCA CTT	CTG CTG TAA
			SSE	D D I>
0.00			·	
820	830	840	850	860
eye ecc	C1C C1C CM2 cm2	•	•	
C2C CCC	GAC CAC GTA GGC	TIC TAT GGT	ACA ACT GTT TAT	CAG TOT COT
	CTC GTG CAT CCG		TOT TOX CAA ATA	GTC AGA GGA
I-	-Ad α-1 domain		T T V Y	QSP>
870				
87U *	880	890	900	910
GGA GAC	ATT GGC CAG MAG	363 639 633	•	
CCI CIG	ATT GGC CAG TAC TAA CCG GTC ATG I G O Y	TOT CTA CTT	TT GAT GGT GAT	GAG TTG TTC
G D	I C Q Y	T H E	E D C	CTC AAC AAG
			. b c b	E L F>
920				
	930	·940	950	960
TAT GTG	GAC TTG GAT AAG	33G 333 30T 0		•
ATA CAC	D L D K	TTC TTT TGA C	TO TOO AGG CIT	CCT GAG TTT
Y V	DLDR	KKT	AC ACC TCC GXX (SGA CTC AAA
			·	P E F>
97	70 9 80			
	*	3,0	2000	1010
CCC CYY I	TTG ATA CTC TTT (GAG CCC CAA C	T CC3 cmc ess .	•
cce cir 1	LAC TAT GAG AAA (TTC GGG GTT CO	A CCT GAC CTT o	LAC ATA GCT
Q	L I L F	E P Q (GLO	N T A
	1020 103	10 104	•	
	•	•	2000	
CCA GAA A	AA CAC AAC TTG G	GA ATC TTG AC	T ANG AGG TOS A	1m mmc 1.co
cor chi i	TT GTG TTG AAC C	CT TAG AAC TG	A TTC TCC AGT T	AL TIC ACC
~			KRC	M 15 🗪
			I-Ad α-1 domain	
1060	1070	1080	1090 11	• •
- CC3 .com	•			
COT CG1 TO	CC AAT GAG GCT C	CT CAA GCG AC	F GTG TTC CCC A	AG TOO COT
PA	TNFA	D 0 10	A CAC AAG GGG T	TC AGG GGA
	Γ N E A	= V A T -2 domain	V F P 1	C S P>
1110	1120	1130	1140	1150
כזכ כזכ כז	NG GGT CAG CCC **	· ·	•	•
כאכ פאכ פא	TO GGT CAG CCC AI AC CCA GTC GGG TM AC G Q P A	TO THE CTT ATO	TCC TTT CTC G	AC AAC ATC
A T I	G Q P	T L I	י אכם אאא כאכ כז	G TTG TAG
			· · · · · · · · · · · · · · · · · · ·	N I>



FIGURE 29 (SHEET 4 OF 4)

	:	1160			11	70			180		:	1190			120	30
	λAG	CCT	CGλ	CXC	TAG	TIC	TAG	TCT	λCC	CYC	TCT	AAT TTA	AGC TCG	TIC	TCA AGT	GTC CAG
	P														5	
		12	210		1	1220			12	3 0		1:	740		1	250
		-	•			•				•			•		-	
	ACA	GAC	GGC	CIT	TAT	GAG	ACC	AGC	TIC	CTC	GTC	AAC	CGT	GAC	CAT	TCC
															GΤλ	
															H	
			12	50		12	270		:	1280			129	30		
				•			•			•						
															GλC	
															CTG	
	F	H	K	L	s	Y									۵	
13	00			1310			132	20		13	330		1	1340		
	•			•		•		•			•			•		
	TAT	GAC	TGC	AAG	GTG	GAG	CAC	TCC	ಜಾ	crc	GAG	GAG	CCG	GTT	CTG	AAA
															GAC	
	Y	D	C	K	V	Ε	H	W	G	L	E	E	P	v	L	K>
										I-	-yq (1-2 0	ionai	.n -		
	139	50		1	360		1	370			176	10				
		•		•	•			•			130	•				
	CAC	TGG	GAG	GAA	Gλλ	GλG	TAC	λTG	CCG	λTG	GAA	TGA				
	GTG	ACC	CTC	CTT	CTT	CIC	ATG	TAC	œ೦	TAC	CTT	ACT				
						Ε										
			×]	EE ta	ag .				>	•				